

TOTAL 10 POINTS
GEOM p. 275 (#3)
(3 points)

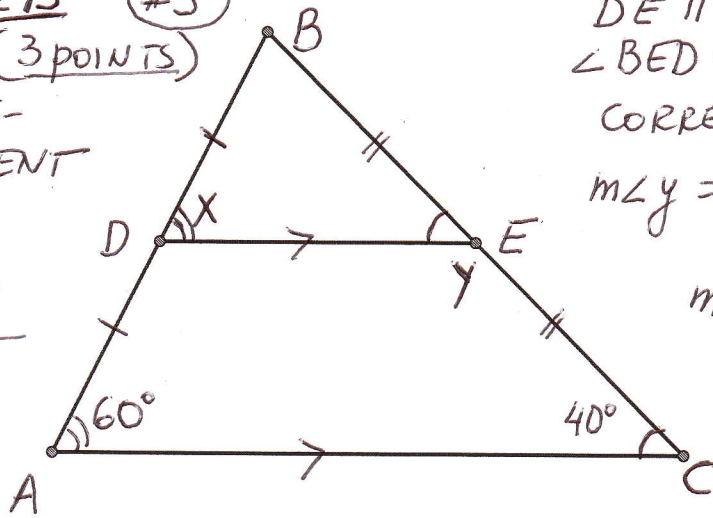
GIVEN: DE-
-MIDSEGMENT

$$m\angle A = 60^\circ$$

$$m\angle C = 40^\circ$$

FIND:

$$m\angle x, m\angle y$$



$$\overline{DE} \parallel \overline{AC} \text{ (C-43)}$$

$$\angle BED = 40^\circ (\angle ACE)$$

CORRESPONDING ANGLES

$$m\angle y = 180^\circ - 40^\circ = \underline{140^\circ}$$

$$m\angle x = \underline{60^\circ}$$

CORRESPONDING
ANGLES

p. 276 (#5)
(4 points)

GIVEN:

T, N, E - MIDPOINTS

$$\overline{TU} = 6;$$

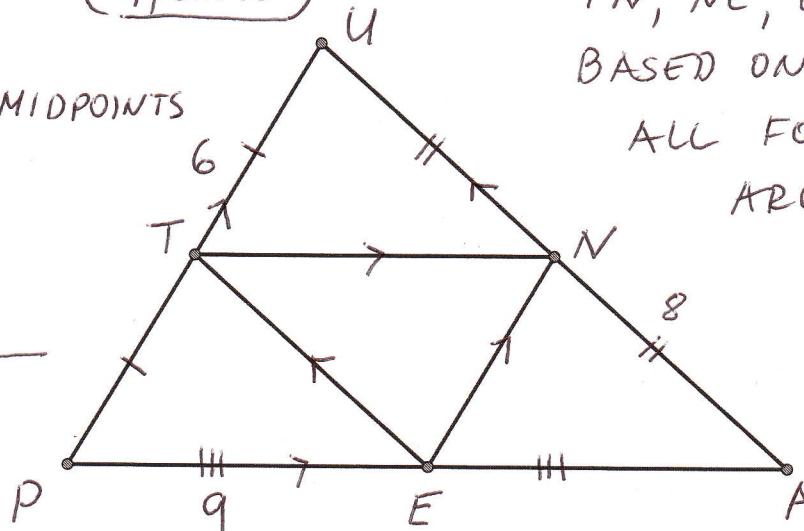
$$\overline{AN} = 8;$$

$$\overline{PE} = 9$$

FIND:

PERIMETER

$\triangle TEN$



TN, NE, ET - MIDSEGMENTS

BASED ON C-42 p. 273,

ALL FOUR TRIANGLES

ARE CONGRUENT.

ALL SIDES

ARE GIVEN

PERIMETER:

$$6 + 8 + 9 = \underline{23}$$

p. 276 (#6) (3 points)

GIVEN:

EF - MIDSEGMENT

$$m\angle A = 73^\circ$$

$$m\angle D = 51^\circ$$

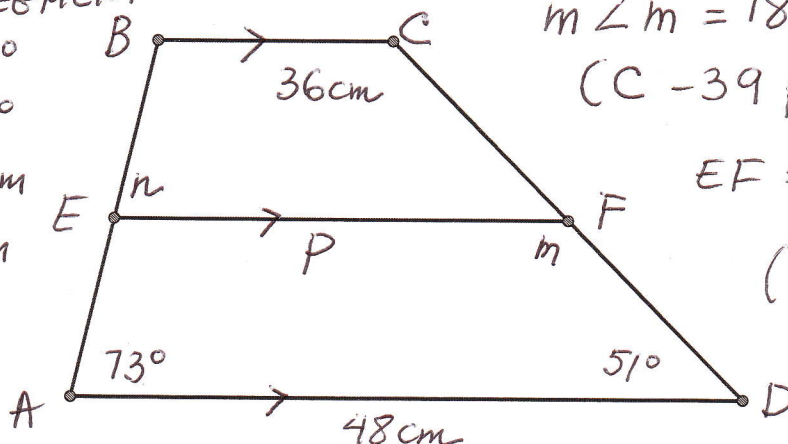
$$BC = 36\text{cm}$$

$$AD = 48\text{cm}$$

$$p - ?$$

$$m - ?$$

$$n - ?$$



$m\angle h = 73^\circ$ CORRESPONDING
ANGLES ($\overline{BC} \parallel \overline{EF} \parallel \overline{AD}$)

$$m\angle m = 180^\circ - 51^\circ = \underline{129^\circ}$$

(C-39 p. 268)

$$EF = \frac{36 + 48}{2} = 42\text{cm}$$

$p = 42\text{cm}$
(C-44 p. 275)